**Newton's First Law   
Exit Ticket**

**Answer Key**

**Use the following vocabulary words to fill in the blanks. Each word is used once.**

**contact inertia speed rest velocity**

**noncontact motion force Galileo acceleration**

**When we measure distance per unit time (a rate), we are measuring \_\_\_\_\_\_\_\_\_speed\_\_\_\_\_\_\_\_\_\_. When we also note the direction, for example if we say we are biking due north at 5 meters per second, we are measuring \_\_\_\_\_velocity \_\_\_\_\_. A change in velocity is defined as \_\_acceleration\_\_.**

**Interaction between two objects made of matter results in a \_\_\_\_\_\_\_\_\_\_\_\_\_force\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We distinguish two categories of forces: \_\_\_\_\_\_Contact\_\_\_\_\_\_\_ forces are those in which matter in the objects touches; examples include friction, air resistance and spring forces. \_\_\_\_Non-contact\_\_\_ forces do not require physical interaction, but instead are the result of objects in a field, such as with gravity, electricity and magnetism.**

**Newton’s first law states that “an object in motion tends to \_\_\_\_\_\_\_\_\_\_stay in motion\_\_\_\_\_\_\_\_\_\_; an object at rest tends to \_\_\_\_\_\_\_\_stay at rest\_\_\_\_\_\_\_\_.” Many years before Newton wrote this law, \_\_\_\_\_\_\_\_Galileo\_\_\_\_\_\_\_\_ stated the same idea as the principle of \_\_\_\_\_\_\_\_inertia\_\_\_\_\_\_\_\_\_\_.**